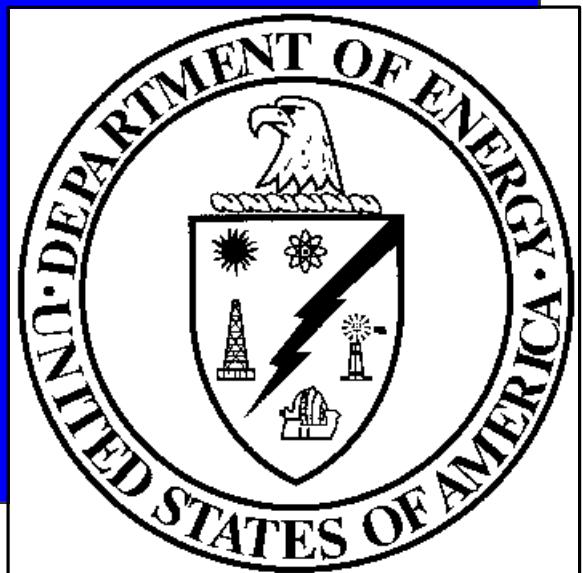


# ***Self-Assessment***

## **Technical Qualification Program Phase I Assessment**

**NEVADA  
OPERATIONS  
OFFICE**

**August 14, 1998**



## **I. Executive Summary**

The Department of Energy formalized a complex-wide technical qualification program in response to Defense Nuclear Facility Safety Board (DNFSB) Recommendation 93-3, *Improving DOE Technical Capability in Defense Nuclear Facilities Programs*. The program was subsequently revised in the first half of calendar year 1998. The new program calls for program and field offices to self-assess their organization's implementation of the program to ensure that processes are in place to adequately support the program and that the program is valid. In other words, "Is the program, as implemented, helping to increase the technical competency of the work force?"

The Nevada Operations Office (DOE/NV) elected to complete its self-assessment July 27 through August 5, 1998. An internal team of evaluators was selected consisting of the team leader who is also DOE/NV's Technical Capability Agent, two Deputy Assistant Managers from technical activities, and the Training Manager who provides administrative support for the program. The team used criteria published by the Technical Capability Panel in the July 1998 guidance document entitled, "*Technical Qualification Program Assessment Guidance and Criteria*."

The methodology for the assessment included:

- reviewing training and qualification records of employees in the program;
- reviewing programmatic procedures, site-specific standards, and other administrative measures used to support the program;
- and administering surveys on multiple aspects of the program to all Technical Qualification Program (TQP) and Senior Technical Safety Manager (STSM) program participants.

The results of the self-assessment indicated that DOE/NV has a mature, well-documented qualifications program. All assessment objectives and criteria were met. There were, however, some recommendations made by the team members which, when implemented, will strengthen the DOE/NV qualification program. Two of these recommendations reside in the human resources area and include ensuring that technical position descriptions reflect the technical competencies of the qualification program and updating the performance appraisal system to better evaluate technical capability. It was also found that there was some confusion over some administrative processes and that many managers were not always sure of the completion status of their employees. This can easily be rectified when the Training Manager provides the next briefing on the program to line management. The last recommendation relates to expanding the program to include any employee who is in a mission-critical position. To accomplish this last recommendation, DOE/NV managers will need to review positions outside of those that are related to defense nuclear facilities and add those to the program that are considered to be mission critical.

When these four recommendations have been accomplished, DOE/NV will have a model qualification program. It will exceed the parameters of the qualification program established in the 93-3 Implementation Plan and will be integrated with the human resource system to ensure continued technical excellence.

## **II. Introduction**

In response to the DNFSB Recommendation 93-3, *Improving DOE Technical Capability in Defense Nuclear Facilities Programs*, the Department of Energy adopted a formal qualification program in the 93-3 Implementation Plan. This qualification program applies to Headquarters and Field Element technical employees who provide management oversight or technical guidance and whose actions or decisions could impact the safe operations of DOE defense nuclear facilities.

The TQP was formalized in May 1995 by DOE Order and the issuance of about 24 Department-wide qualification standards approved for use by senior management. DOE/NV selected roughly 40 positions for inclusion in the program encompassing managers, supervisors, and employees. Many were initially selected in late summer and early fall 1995, following which the Human Resources Division conducted a series of workshops to brief participants on the TQP, its associated qualification cards, and their use. The Human Resources Division provided participants with decision trees, job aids, forms, and assistance to make training and development decisions and to document their qualification progress. Additional participants, such as STSM and managers and staff in the Safeguards and Security Division, came into the program in late calendar year 1996 and early 1997. This group was also provided with briefings and assistance in completing their qualification records.

The purpose of this assessment is to determine DOE/NV's level of accomplishment in implementing its TQP and STSM program as specified through the requirements and guidance provided in DOE Order 360.1 and subsequent guidance published by the DOE Technical Capability Panel. The order requires the conduct of periodic self-assessments of TQP implementation and progress to achieve qualification for all technical personnel enrolled in the program. The Technical Capability Panel's guidance addresses objectives and criteria for such an evaluation and discusses assessment methodologies. The intent of both documents is for organizational elements to evaluate their programs using standardized criteria, and then to revise their programs based upon any identified deficiencies.

The format for this assessment will include a description of the scope and methodology used in the conduct of the assessment and a synopsis of the data obtained. This will be followed by an analysis of the results with recommendations for program improvement.

### III. Scope and Methodology

The scope of this assessment includes a review and evaluation of the processes used, the program decisions made, and the records and documentation associated with the following program objectives. The criterion for each objective is listed on the assessment form in Attachment B.

- TQP-1. Demonstration of Competence: The program clearly identifies and documents the process used to demonstrate employee technical competence.
- TQP-2. Competency Levels: Competency requirements are clearly defined and consistent with applicable industry standards for similar occupations.
- TQP-3. Plans and Procedures: Plans and/or procedures are developed and implemented to govern the administration of the program.
- TQP-4. Qualification Tailored to Work Activities: The program includes the identification of unique Department and position-specific work activities, and the knowledge and skills necessary to accomplish that work.
- TQP-5. Credit for Existing Technical Qualification Program(s): The program is structured to allow credit, where appropriate, for other TQP accomplishments.
- TQP-6. Transportability: Competency requirements that are identified as having Department-wide applicability are transferable.
- TQP-7. Measurable: The program contains sufficient rigor to demonstrate compliance to the principles.

A team of senior line managers and DOE/NV's Training Manager conducted the assessment. Resumes of these employees appear in Attachment C of this report. The team consisted of the following personnel:

- **Team Leader** - Michael Marelli, Deputy Assistant Manager for Technical Services and Technical Capability Agent
- Gylan Allen, Deputy Assistant Manager for National Security
- Stephen Mellington, Deputy Assistant Manager for Environmental Management
- Audrey Clark, Training Manager, Human Resources Division, Assistant Manager for Business and Financial Services

The basis for the assessment is derived predominantly from the Technical Capability Panel's July 1998 guidance document entitled, *Technical Qualification Program Assessment Guidance and Criteria*." These requirements were assembled into assessment instruments where information could be easily documented. The information acquired was analyzed and incorporated into the body of the report. The approach featured three data collection methods:

- A review of the training and qualification records for 10 individuals randomly selected from the TQP and STSM program.
- A review of programmatic procedures, job aids, site-specific standards, databases, and correspondence that are used to describe, control, measure, or define how DOE/NV's TQP and STSM program are administered.
- Surveys administered to all TQP and STSM program participants. Two sets of questions were developed; one to solicit information from the TQP participants and the other from the STSM participants and first line supervisors of TQP participants.

#### **IV. Results**

The status of the record review and other programmatic reviews is shown in the tables in Attachment A. The results of the participant and manager surveys are shown in the table in Attachment B.

All objectives and criteria were met. The program was mature and fully functioning with extensive documentation of all qualification records. There were, however, two criteria identified by the team through the review process that require further emphasis and four survey items that bear discussion.

##### **1. Objectives and Criteria:**

- When DOE/NV designated positions to be included in the TQP, determination was predominantly made on the basis of defense nuclear facility involvement. Although a decision tree was in place that allowed managers to designate positions "critical to the operations or missions" conducted at the office, this was done in a very limited fashion. The assessment team determined that since DOE/NV's missions have shifted over the last three to five years, it is timely to reassess positions which by their risk or hazard would be likely candidates for the TQP. DOE/NV recognizes that when other non-defense nuclear positions are added as TQP candidates, it will exceed the original requirements of the program. This is in keeping, however, with the office's vision for Integrated Safety Management.

- DOE/NV has inculcated the review of the Federal Technical Capability Agent into the hiring process for technical positions. This has been accomplished by a change to procedures which requires the Federal Technical Capability Agent's signature on crediting plans for technical positions. Additionally, the Federal Technical Capability Agent's position description has been amended to reflect those responsibilities. However, all technical positions do not clearly reflect the technical competencies inherent in the work performed. Likewise, technical aspects of job performance are not fully defined in the performance appraisal process.

## 2. Survey Results:

DOE/NV received a high return of responses from those surveyed. Seventy-seven percent of TQP participants responded and eighty-one percent of STSM participants and supervisors responded. The data below will indicate the percentage of respondents completing the surveys.

- Twenty-five percent of TQP participants and fifteen percent of STSM participants indicated they were unsure that the equivalency process adequately determined the acquisition of a competency.
- Forty percent of TQP participants and seventy-seven percent of STSM participants were unsure that changes were made to the TQP based upon feedback. The assessment team believes that these statistics reflect more the lack of TQP and STSM participants providing feedback and knowledge about how the feedback is handled, than disregard of feedback. There were documented instances where tests, procedures, and documentation formats were changed based upon participants' feedback.
- Thirty percent of STSM participants did not know the completion status of each of the TQP and/or STSM participants within their organizations.
- Forty-six percent of STSM participants indicated that they were unsure if the TQP and/or STSM program increased their employees' technical skills and knowledge. The assessment team determined that the STSM participants have not communicated with their employees on this issue, in that eighty percent of TQP participants felt that their skills and knowledge have been increased as a result of the program.

## V. Recommendations:

1. Managers review mission critical positions—working outside of the operation or oversight of defense nuclear facilities—to determine which, if any, should be included in the TQP and STSM program.

2. Managers review and update mission critical technical position descriptions to reflect technical competencies.
3. Training Manager brief the Leadership Team on the equivalency process, the TQP process change system, and the completion status of the participants in the program.
4. Human Resources Division review and update the performance appraisal process, so that it better reflects performance of technical competencies.

## APPENDIX A

### TECHNICAL QUALIFICATION PROGRAM ASSESSMENT OBJECTIVES AND

#### TQP-1 Demonstration of Competence: The program clearly identifies and documents the process used to determine competence.

Criteria	Justification
1.1 At a minimum, personnel providing management direction or oversight that could impact the safe operation of a defense nuclear facility have been identified as participants in the Technical Qualification Program (TQP).	<p>First Line Supervisors evaluate the work being performed in their respective activities and criticality demands them to be placed into the TQP. The positions are determined T position provides management, direction, oversight, or assessments to a defense nuclear impacts the safe operation of a defense nuclear facility, or 3. the position is critical to th conducted at DOE/NV. Once determination is made, a request for enrollment is for Manager for approval. Once approved, the request is forwarded to the Human Resources the candidate in structuring a training and development program to complete TQP paramet</p> <p>At this time, DOE/NV has effectively enrolled all positions involved with defense nuclear However, since DOE/NV's missions have changed since the inception of the program reassess those positions that might impact the operation or missions of DOE/NV, sans nuclear. This would result in either a validation of the positions currently in the program encompassing list of TQP candidates.</p> <p>Additional information regarding this subject may be found in HRD.TDP.TQP.01, Identification Qualification Program Participants.</p>
1.2 Individual Development Plans (IDPs), training plans, technical qualification records, or other related documents are updated to reflect the activities that each individual shall participate in to satisfy competencies.	<p>All participants in the TQP and Senior Technical Safety Manager (STSM) program have completed documented training and development activities. In fact, justification detailing the education some employees was so extensive that a second format for documenting TQP and STSM f and approved by the Training Manager. Status reports detailing the employee's progress a periodically, when requested. Copies of TQP completion certificates or other documentation participants' Employee Development Files.</p> <p>Additional information regarding this subject may be found in HRD.TDP.TQP.03, Completion Activities and in HRD.TDP.TQP.04, Documentation of Learning Activities.</p>



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### **TQP-1 Demonstration of Competence: The program clearly identifies and documents the process used to demonstrate competence.**

Criteria	Justification
1.3 A formal evaluation process is in place to objectively measure the technical competency of personnel. The rigor of the evaluation process is commensurate with the responsibilities of the position.	<p>At DOE/NV, each First Line Supervisor and the Training Manager independently evaluate qualifications to ensure adequacy and that the participant can perform the competency at the level. If the supervisor does not have the requisite knowledge to assess an employee's competency in a specific area, a qualifying official with the appropriate technical expertise will be designated to do the evaluation. The evaluation process is clearly explained in the DOE/NV computer-based training program, Qualifying Official Training Program developed by Training and Development Program staff and in the procedure cited below.</p> <p>Additional information regarding this subject may be found in HRD.TDP.02, Qualification Program.</p>

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TQP-2 Competency Levels: Competency requirements are clearly defined and consistent with applicable industry occupations.	
Criteria	Justification
2.1 Competency requirements include clearly defined knowledge, skill, and ability elements.	DOE/NV has elected to use the existing TQP qualification standards established by DOE/NV. Competency requirements in those standards include the skills, knowledge and abilities identified in the standards.  Additional information regarding this subject may be found in HRD.TDP.TQP.04, Documenting Qualification Standards and in HRD.TDP.TQP.05, Office/Facility-Specific Qualification Standards.
2.2 Subject matter experts are involved in establishing competency requirements.	DOE/NV has elected to use the existing TQP established by DOE/HQ. At the time the standards were developed, subject matter experts from across the DOE complex met to conduct tabletop exercises to ensure that the standards reflected the skills, knowledge and abilities required, and the minimum level of performance for each function. DOE/NV consulted with subject matter experts to this project. Additionally, Office-Facility Specific Qualification Standards were reviewed through the first and second line supervisors before receiving final approval by the DOE/NV Assistant Manager and Manager.
2.3 Consideration of related professional certification requirements is included in the program, as applicable.	As part of documentation and verification of competency acquisition, professional certification requirements are included as part of the document review and record keeping process. Where applicable, certification is required in the area of specialty, i.e., Professional Engineer (PE) or Registered Environmental Manager (REM).  Additional information regarding this subject may be found in HRD.TDP.TQP.02, Employment Requirements and in HRD.TDP.TQP.06, Qualification and Completion of Programs.

## APPENDIX A

### TQP-2 Competency Levels: Competency requirements are clearly defined and consistent with applicable industry occupations.

Criteria	Justification
<p>2.4 Competency requirements are identified in the areas listed below (Note: this does not imply that three separate documents are required).</p> <p><u>Basic Technical Knowledge:</u> This includes basic fundamental knowledge of Radiation protection, occupational safety, chemical safety, nuclear safety, Environmental regulations, and other areas.</p> <p><u>Technical Discipline Competency:</u> Competency in a technical discipline (e.g., Mechanical engineering, chemical engineering) which can be demonstrated by Education, professional certification, examination or on-the-job performance.</p> <p><u>Position Knowledge, Skills, and Abilities:</u> Specific to the position and the Office.</p>	<p>DOE/NV has elected to use the existing TQP qualification standards established by DOE/ID. Competency requirements in those standards include the skills, knowledge and abilities identified in the standards. Competency requirements are separated into three groups:</p> <ul style="list-style-type: none"> <li>General Technical Base</li> <li>Functional Area Standards</li> <li>Site Specific Standards</li> </ul> <p>Additional information regarding this subject may be found in HRD.TDP.TQP.04, Document Management System, in HRD.TDP.TQP.05, Office/Facility Specific Qualification Standards, and in ITP, Training and Qualification and Completion of Program.</p>

## APPENDIX A

TQP-3 Plans and Procedures: Plans and/or procedures are developed and implemented to govern the administration of the Technical Qualification Program	
Criteria	Justification
3.1 The Technical Qualification Program has the commitment of senior management.	<p>At DOE/NV, senior management commitment is evidenced by the fact that all first and second line management review the participant's TQP qualification package and attest, by their signature, that the employee has the required competencies. Senior management has also supported participation in multiple technical qualification programs. DOE/NV supervisors and managers monitor employees' progress and routinely request updates from participants. Each TQP participant receives a Certificate of Completion and a congratulatory letter from the DOE/NV manager and each TQP package is coordinated through the first and second line management officials have voluntarily served as DOE/NV's Alter Ego and Federal Technical Qualification Program and played an active role in program development locally and at DOE/HQ. DOE/NV has successfully implemented the STSM, and its products have been used as examples for other facilities.</p> <p>Additional information regarding this subject may be found in HRD.TDP.TQP. 01, Identification of Technical Qualification Program Participants and in HRD.TDP.TQP. 06, Qualification and Completion of Program.</p>
3.2 Written procedures that adequately define the processes and requirements to implement the Technical Qualification Program are in place.	<p>DOE/NV has developed a comprehensive set of procedures that govern the administration of the Technical Qualification Program. The procedures are:</p> <ul style="list-style-type: none"> <li>• HRD.TDP.TQP.01, Identification of Technical Qualification Program Participants</li> <li>• HRD.TDP.TQP.02, Employee Evaluation and Exemptions/ Equivalencies</li> <li>• HRD.TDP.TQP.03, Completion of Learning Activities</li> <li>• HRD.TDP.TQP.04, Documentation of Learning Activities</li> <li>• HRD.TDP.TQP.05, Office/Facility Specific Qualification Standards</li> <li>• HRD.TDP.TQP.06, Qualification and Completion of Program</li> <li>• HRD.TDP.TQP.07, Control and Administration of Tests</li> <li>• HRD.TDP.TQP.08, Development of Tests</li> <li>• HRD.TDP.TQP.09, Qualifying Facility Representatives</li> <li>• HRD.TDP.TQP.10, Conduct of Oral Boards</li> <li>• HRD.TDP.TQP.11, Final Evaluated Walk-Through-Facility Representatives</li> </ul>

## APPENDIX A

TQP-3 Plans and Procedures: Plans and/or procedures are developed and implemented to govern the admin	
Criteria	Justification
3.3 Roles and responsibilities for the implementation of the Technical Qualification Program are clearly defined and understood by all involved.	Roles and responsibilities are clearly delineated in above-cited procedures. The position d DOE/NV Federal Technical Capability Agent has been amended to include TQP responsil oversight of TQP. Copies of appropriate procedures are given to supervisors and each part supervisor receives a briefing upon entry into the program. When the TQP was initially de briefings/presentations were delivered frequently. Since that time, information about the T disseminated to all facets of the organization, thus briefings are now given upon request.
3.4 The procedures that govern the implementation of the Technical Qualification Program are understood by all involved, and are being implemented as written.	The DOE/NV Training Manager ensures that the TQP is implemented as designed. A TQ Checklist is used to monitor program status and to ensure procedures are being followed. their supervisor receive a briefing upon entry into the program. When the TQP was initial briefings/presentations were delivered frequently. Since that time, information about the T disseminated to all segments of the organization, thus briefings are now given upon reques Appendix B, clearly indicates that personnel do understand their TQP roles and responsibi
3.5 A training and qualification records system is established for each employee in the Technical Qualification Program.	<p>The training organization maintains extensive documentation on each TQP participant. A participant's qualification records are kept on file, and each employee receives a complete package, which is standardized for ease of use. In addition, copies of TQP completion cer documentation is kept in the participant's Employee Development File.</p> <p>Additional information regarding this subject may be found in HRD.TDP.TQP.04, Docum Activities.</p>

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TQP-4 Qualification Tailored to Work Activities: The program includes the identification of unique Department activities, and the knowledge and skills necessary to accomplish that work.	
Criteria	Justification
4.1 An analysis has been performed to identify the related knowledge, skill, and ability elements to accomplish the duties and responsibilities for each Technical Qualification Program functional area or position.	DOE/NV has elected to use the existing TQP established by DOE/HQ. At the time the contract was developed, subject matter experts from across the DOE complex met to conduct tabletop exercises to identify the skills, knowledge and abilities required, and the minimum level of performance for each functional area to ensure that no gaps existed, comments and input were solicited from the field. DOE/NV contracted for subject matter expertise to this project.
4.2 The program includes job-specific requirements related to the rules, regulations, codes, standards, and guides necessary to carry out the mission of the office	The General Technical Base, Functional Area, and Site Specific Qualification Standards are related to the rules, regulations, codes, standards and guides necessary to carry out the mission of the office. Where further information was required, DOE/NV developed site specific qualification standards for STSM Representatives and STSM positions. This was completed as a coordinated effort between DOE/NV, STSM Representatives, experts, supervisors, and the training organization, and was based upon the missions of the office.
4.3 The program supports the mission needs of the office.	DOE/NV used a graded approach in supporting mission needs regardless of its nuclear facility. In non-nuclear hazardous operational areas, the program was expanded to put greater emphasis where needed. Qualification Standards were designed based on the level of risk and hazard involved. As a result of the reassessment of the positions impacting hazardous, non-nuclear facilities/activities needs to ensure that the employees occupying these positions are fully qualified, and their records documented against the TQP parameters. This exceeds the current TQP requirements, but is in keeping with DOE's Integrated Safety Management.

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### TQP-5 Credit for Existing Technical Qualification Program(s): The program is structured to allow credit, with Technical Qualification Program accomplishments.

Criteria	Justification
5.1 Credit(equivalency) is granted for previous training, education, experience, and completion of related qualification/certification programs, where applicable.	<p>DOE/NV follows the guidance on equivalencies as stated in DOE Order 360.1. All equivalencies are granted upon objective evidence or the First Line Supervisor's determination of competent job performance. The First Line Supervisor approves/disapproves justification for equivalencies to competencies. For areas in which the supervisor is not technically competent, a qualifying official will approve/disapprove the equivalency. Equivalencies are granted for prior education, training, or experience.</p> <p>Additional information regarding equivalencies can be found in HRD.TDP.TQP.02, Employee Exemptions/Equivalencies.</p>
5.2 Equivalency is granted based upon a review and verification of objective evidence such as transcripts, course certificates, test scores, or on-the-job experience.	<p>All equivalencies granted are based upon objective evidence or the First Line Supervisor's performance. The First Line Supervisor approves/disapproves justification for equivalencies to competencies. For areas in which the supervisor is not technically competent, a qualifying official will approve/disapprove the equivalency. Equivalencies are granted for prior education, training, or experience.</p> <p>Additional information regarding equivalencies can be found in HRD.TDP.TQP.02, Employee Exemptions/Equivalencies.</p>
5.3 Equivalencies are validated, approved, and documented in a formal manner.	<p>DOE/NV follows the guidance on equivalencies as stated in DOE Order 360.1. The First Line Supervisor approves/disapproves justification for equivalencies to competencies. For areas in which the supervisor is not technically competent, a qualifying official will approve/disapprove the equivalency. Equivalencies are granted for prior education, training, or experience.</p> <p>All requests for equivalencies are reviewed by the employee's First and Second Line Supervisor and the Training Manager. The equivalencies are documented in the participant's qualification record.</p> <p>Additional information regarding equivalencies can be found in HRD.TDP.TQP.02, Employee Exemptions/Equivalencies.</p>

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TQP-6 Transportability: Competency requirements that are identified as having Department-wide applicability	
Criteria	Justification
6.1 The program includes all of the competencies that have been identified as having Department-wide applicability.	DOE/NV has elected to use the existing TQP established by DOE/HQ. At the time the competencies were developed, subject matter experts from across the DOE complex met to conduct tabletop exercises to ensure that no gaps existed, comments and input were solicited from the field. DOE/NV contributed its expertise to this project. At the time the competencies were developed, efforts were undertaken by subject matter experts to ensure that crosscutting needs were addressed throughout the complex.
6.2 Formal documentation of the completion of Department-wide competencies is maintained in a manner that will allow for easy transferability.	DOE/NV has elected to use the existing TQP established by DOE/HQ. At the time the competencies were developed, subject matter experts from across the DOE complex met to conduct tabletop exercises to ensure that no gaps existed, comments and input were solicited from the field. DOE/NV contributed its expertise to this project. At the time the competencies were developed, efforts were undertaken by subject matter experts to ensure that crosscutting needs were addressed throughout the complex. Documents documenting qualifications and each employee is provided with a copy. Transportability is maintained across the complex.  Additional information regarding this subject may be found in HRD.TDP.TQP.04, Documenting Competency Activities.
6.3 The Technical Qualification Program is integrated with personnel-related activities such as position descriptions, vacancy announcements, recruiting, and performance appraisals.	DOE/NV has assured that the Federal Technical Capability Agent reviews all crediting positions prior to the supervisor's review/approval. Position descriptions do not, in all cases, reflect competencies inherent in the work performed. The critical technical position descriptions, however, are updated to reflect TQP requirements. Currently, the performance appraisal process does not reflect the competency requirements cited in the TQP.



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### TQP-7 Measurable: The program contains sufficient rigor to demonstrate compliance to the principles.

Criteria	Justification
7.1 The technical competency of personnel who have completed the requirements of the Technical Qualification Program is adequate and appropriate.	DOE/NV employees holding technical positions have academic degrees in technical areas and experience in their fields. Also, the First Line Supervisor's signature attests that the employee has completed a particular competency. The Work Force Review Group reviewed the STSMs to ensure incumbent employees had the required education, experience, or compensatory positions.
7.2 The program allows for continuous feedback and periodic evaluation to ensure that it meets the needs of the Department and the mission(s) of the office.	<p>The Training and Development Program will provide, at a minimum, a yearly briefing, to report on the status of the TQP and the STSM. During that briefing, positions falling under the qualification programs will be reviewed to determine if they still reflect the high priority to the organization and its mission. Additionally, the Training Manager will provide managers with completion of individual enrollees. Recognizing that continuous feedback and evaluation is key to success, the training organization welcomes all comments from senior management, supervisors, participants, or others that relate to program content or administration.</p> <p>Additional information regarding this subject may be found in HRD.TDT.TQP.01, Identification of the Qualification Program.</p>
7.3 The program includes provisions for continuing training.	Continuous training is a part of the IDP process. As current TQP standards are updated, training will be updated to meet new qualification standards. Also, senior management in concert with the training organization will ensure that technical training is a priority for TQP participants, and that the core values of the organization are reflected in Individual Development Plans.

## APPENDIX B

### Statistical Summary of Participant and Manager Surveys

#### DOE/NV Technical Qualification Program and Senior Technical Safety Manager Program

																						26 surveys, 20 responded (77%)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Y	N	U	
your technical training	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	0%	0%	
chnical skills and	Y	U	N	N	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	80%	10%	10%	
ad responsibility in the	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	95%	0%	5%	
ccess adequate to nition of an	Y	Y	Y	Y	Y	U	Y	Y	N	Y	Y	U	U	Y	Y	Y	U	U	Y	Y	70%	5%	25%	
based upon feedback	U	U	U	Y	Y	N	U	U	U	Y	Y	Y	Y	Y	Y	U	U	Y	Y	Y	55%	5%	40%	
vision provide t for the TQP?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	Y	95%	0%	5%	
																					16 surveys, 13 responded (81%)			
																					Y	N	U	
atus of each of the /ithin your	Y	Y	Y	Y	N	N	U	Y			Y		N								60%	30%	10%	
e IDP and/or chnical training	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y								100%	0%	0%	
gram increased your knowledge?	U	Y	U	Y	Y	Y	U	Y	U	Y	Y	U	U								54%	0%	46%	
and/or STSM nsibility in	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y								92%	0%	8%	
adequate to determine in employee?	Y	Y	Y	U	Y	U	Y	Y	Y	Y	Y	Y	Y								85%	0%	15%	
personnel who P adequate and	Y	Y	Y	Y	Y	Y	Y	Y			Y		Y								100%	0%	0%	
or STSM based upon t or participants?	U	Y	U	U	U	U	U	N	Y	U	U	U	U								15%	8%	77%	
vision provide t for the TQP and	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y								100%	0%	0%	

**APPENDIX C**  
**RESUMES OF TEAM MEMBERS**

**Senior Technical Safety Manager  
Qualification Resume**

<b>Name:</b>	<b>Michael A. Marelli</b>
<b>Organization:</b>	<b>DOE Nevada Operations Office</b>
<b>Position Title:</b>	<b>Deputy Assistant Manager for Technical Services</b>
<b>Education Summary:</b>	<b>A.A. Engineering, Okaloosa-Walton Junior College B.S. Nuclear Engineering Sciences, University of Florida M.S. Health Physics, University of Florida</b>

**Relevant Background/Experience Summary:**

**2/96 - Present - Deputy Assistant Manager for Technical Services, DOE/NV**

- Manage a diverse workforce of over 80 federal personnel
  - Performance-based management contract
  - Management and operating (M&O) contract
- Leads various technical and management issue resolution efforts
- Manage yearly budget of over \$60M

**3/90 - 2/96 - Deputy Director and Acting Director, Health Protection Division, DOE, NV**

- Provided program management for programs assigned to the Health Protection Division:
  - Litigation Support
  - Community Radiation Monitoring
  - Off-Site Radiation Exposure Review Project
  - Historical Dosimetry Research
  - EPA Off-Site Environmental Monitoring Program
  - Radiation Protection
  - Industrial Hygiene
  - Occupational Medical Program

- Led the develop of a number of management tools and techniques designed to clearly identify our new mission and organization responsibilities, improve employee productivity, increase responsiveness of the division to mission requirements, document the division work effort sufficiently to acquire adequate personnel resources, and integrate the concepts of TQM
  - Tools included a division management plan, DOE/NV's first compliance deficiency automated tracking system, and revised employee specific position descriptions and performance standards
- Served on the DOE/NV Test Controller's Underground Nuclear Test Advisory Panel as the health physics advisor
  - Required extensive knowledge of nuclear device testing procedures, criteria, and experience with accidental radioactive release
  - Required knowledge of DOE/NV commitments to and relationships with the State of Nevada and the ability to integrate on-site radiation protection resources with EPA's off-site support to effectively evaluate and respond to an accidental radioactive release
- Led the development of DOE/NV first orders to clearly define the unique requirements for health physics and industrial hygiene at the NTS
- Managed a diverse workforce consisting of federal and contractor engineers, scientists, and administrative personnel
- Managed a yearly budget of over \$9M

**2/88 - 3/90 - Chief, Health Protection Division, DOE/NV**

- Provided program management and compliance oversight of all activities performed by federal and contractor/user personnel for DOE/NV with regard to health physics and industrial hygiene
- Led the staff in the development of a branch management plan and rewrite of position descriptions to identify/develop:
  - Work that needed to be done
  - Plans by which we agreed to accomplish the work
  - Areas where the professionals preferred to concentrate their efforts
  - Performance plans to identify specific measures of performance
- Developed a number of management systems to ensure the timely response to all assigned action items, accurate filing of all correspondence/information, and the effective communication between staff and management
  - Coordinated the first "mock" tiger team assessment of the Nevada Test Site (NTS), which was instrumental in helping DOE/NV identify its own compliance deficiencies

- Instituted quarterly community technical conferences on health physics and industrial hygiene
- Managed a diverse workforce consisting federal and contractor engineers, scientists, logistics, and administrative personnel
- Managed a yearly budget of over \$9M

**12/87 - 2/88 - Senior Health Physicist, Health Protection Division, DOE/NV**

Coordinated the development of the DOE/NV implementation plan of the new DOE Order 5480.11, Requirements for Radiation Protection.

**9/86 - 12/87 - Health Physicist, DOE/HQ**

- ***Program Manager - DOE Accelerator Health Physics Upgrade Effort:***
  - Initiated and managed a DOE-wide accelerator characterization effort to identify applied health physics research needs in the areas of dosimetry and performance test specification, and radiation protection instrumentation
  - Manage the development of radioassay methodology for accelerator produced radioactive waste
  - Coordinate and participate in the development of release criteria for use in disposition of accelerator produced radioactive waste
- ***Program Manager - Beta Dosimetry and Instrumentation Upgrade:***
  - Reviewed technical research and funding proposals for applicability
  - Established research priorities and approved program milestones
  - Provided technical review of research reports and contractor technical performance evaluations
- ***Program Manager - DOE Implementation of ANSI N42.17A - Performance Specifications for Health Physics Instrumentation:***
  - Managed contracted effort to evaluate the ANSI N42.17A draft standard for applicability to DOE facility environments through the analysis of field questionnaire data and the development and utilization of instrument testing equipment to test field instruments now in use
- ***Geologic Waste Repository Program:***
  - Participated in the program as the DOE/HQ Office of Nuclear Safety representative tasked to review all site characterization documentation with respect to radiation protection of the site worker

- ***Radioactive Waste Transport - Support to DOE/HQ Defense Programs:***
  - Selected as the Office of Nuclear Safety health physicist tasked to support DP on technical health physics matter involving the shipment of radioactive waste
  - Assisted in the resolution of a significant conflict between DOE and CSX, a major rail shipment company, regarding potential exposure to rail yard worker involved in the handling of radioactive shipments for DOE
- ***Transuranic Contaminated Environments:***
  - Managed the efforts of Oak Ridge National Laboratory (ORNL) who provided technical support assistance to the Spanish government in the conduct of environmental sampling and analysis and bioassay follow-up of area residents
  - Assured adequate funding was provided to ORNL for technical support assistance to the Spanish government in accordance with international agreements
  - Maintained technical awareness of research findings at Palomars and Enewetak and recommended programmatic changes
  - Evaluated and provided technical comments on the proposed EPA interim guidance for remedial action levels for transuranic contaminated environments
- ***Technical Safety Appraisals:***
  - Assisted in the development of radiation protection performance objectives and criteria
  - Review the accumulated TSA radiation protection findings for trends of common deficiencies among facilities
- ***Medical X-Ray Equipment Survey Program:***
  - Assured the technical adequacy of an interagency agreement with the FDA
  - Reviewed facility FDA survey reports with respect to possible required refinements in DOE policy
- ***Nuclear Facility Safety Documents:***
  - Responsible for reviewing and providing comments with respect to radiation protection on:
    - Environmental Impact Statements
    - Environmental Assessments
    - Safety Analysis Reports
    - Construction/modification design documents

- ***DOE/HQ Health Physicist for the design of the Superconducting Supercollider (SSC):***
  - Assisted DOE/HQ Energy Research in the assessment of the adequacy of the SSC Central Design Group's evaluation of radioactive source terms, application of DOE policy, and design of facility radiation protection features regarding potential doses

**2/81 - 9/86 - Senior Health Physicist, DOE/NV**

**Projects and assignments:**

- Dosimetry Research Project
- External Dosimetry
- Radiation Worker Policy Development and Implementation
- DOE/NV Representative for the revision of DOE 5480.1A "Environmental Protection, Safety, and Health Protection Information Reporting Requirements"
- DOE/NV Representative for the revision of DOE 5480.11 "Requirements for Radiation Protection"
- DOE Laboratory Accreditation Program Inspector
- Device Assembly Facility Health Physicist
- Radiological Safety Advisor for Nuclear Device Tests
- Radiological Assistance Team Captain
- Oral History Project Manager
- Epidemiology Research
- Member of the Ground Test Site Selection Committee for Sp-100, a 100 KW Space Power Fast Spectrum Reactor
- Lead Health Physicist in the design/construction of the Device Assembly Facility

**11/77 - 2/81 - Health Physicist, DOE/NV**

**Projects and assignments:**

- Technical Advisor to several decontamination and decommissioning projects including Enewetak Atoll, GNOME (NM), GASBUGGY (NM), and Johnston Atoll
- Nevada Test Site Radiation Instrumentation Program
- Westinghouse/Lawrence Livermore National Laboratory Spent Reactor Fuel Assembly Encapsulation and Temporary Storage Testing at the NTS
- Radiation Safety Advisor on Nuclear Device Tests
- Development of State-of-the-art Whole Body Counter
- Test Site Pre-cleanup Surveys
- Radioactive Material Package and Shipping Program



**8/76 - 8/77 - Project Manager, Department of Environmental Engineering Sciences, University of Florida**

- Coordinated UF project activities with the Florida Power Corporation regarding environmental radiation surveillance program for the Crystal River Nuclear Power Plant
- Maintained optimum performance of all instrumentation and computer systems
- Designed and modified project procedures to meet all surveillance requirements, data analysis, and report writing

**Senior Technical Safety Manager  
Qualification Resume**

<b>Name:</b>	<b>Gylan C. Allen</b>
<b>Organization:</b>	<b>DOE Nevada Operations Office</b>
<b>Position Title:</b>	<b>Test Readiness Manager, Assistant Manager for National Security</b>
<b>Education Summary:</b>	<b>B.S. , Physics, Brigham Young University Graduate Work in Physics, University of Washington</b>

**Relevant Background/Experience Summary:**

**3/96 - Present - Test Readiness Manager, Assistant Manager for National Security (AMNS), DOE/NV**

- Provide expert advice and assistance to the AMNS, the Manager, DOE/NV, and to the Office of Defense Programs at DOE/HQ regarding programs of a critical nature to DOE. These programs include, but are not limited to:
  - Science-based Stockpile Stewardship
  - Stockpile Management
  - Emergency Response
  - Treaty Verification and Nonproliferation
  - Defense Experimentation and Test Readiness
- Serve as DOE/NV test controller for experiments that use high explosives and special nuclear material. Carry out the following duties:
  - As the DOE Manager's representative, control all activities at the Nevada Test Site during the test execution period.
  - Manage the DOE/NV Test Execution Organization
  - Make decisions that affect the safety of personnel at the Nevada Test Site and possible offsite.
  - Determine that adequate safety conditions exist before giving authority to conduct these experiments to the sponsoring laboratory
  - Deal with local, state and federal officials in conducting these experiments
- Completed the training and certification program required for the DOE/NV test controller position. (This is one of the critical positions identified by DOE as being essential for the safe conduct of an underground nuclear test)
- Serve as the DOE/NV interface with the Defense Nuclear Facilities Safety Board, which reports to Congress

- Serve as an Energy Senior Official for NEST, FRMAC and other emergency response field operations
- Serve as team leader for nuclear testing treaty verification activities
- Provide technical advice and assistance regarding strategies, plans and actions for the management and execution of critical programs pertaining to the Defense Program missions and operations at DOE/NV

**1995/1996- Director, Emergency Management and Nonproliferation Division, Assistant Manager for Operations, DOE/NV**

- Provided program management for emergency programs at DOE/NV with supervisory responsibilities for 22 federal employees and administered \$50M annual budget with contractors and national laboratories
- Assured field readiness for responding either CONUS or OCONUS to nuclear emergencies caused by terrorists threat, nuclear reactor accidents or other radiological incident
- Served as DOE/NV chair of the Nuclear Emergency Search Team (NEST) Management Council and NEST advisory board
- Served as Energy Senior Official during an emergency call out requiring DOE/NV support
- Served as member of watch bill for technical support to classified Department of Defense missions
- Directed the DOE/NV nonproliferation program, provided support to DOE/HQ for Comprehensive Test Ban Treaty negotiations in Geneva, Switzerland, and maintained Threshold Test Ban Onsite Inspection equipment in a ready to deploy condition for the Onsite Inspection Agency
- **2/90 - 3/95 - Director, Test Operations Division, Assistant Manager for Operations, DOE/NV**
- Provided scientific, technical, and operational management and control in the accomplishment of the office's primary mission—the safe and timely execution of the nation's underground nuclear weapons test program
- Provided professional, scientific and technical expertise in the conception, planning, execution, and control of a complex and comprehensive program of nuclear and nonnuclear research and development (R&D) and other tests, experiments, studies, projects, and other activities undertaken at the Nevada Test Site (NTS).
- Managed 1,350 square mile NTS which incorporated total fixed and movable assets valued between 900M-1B.
- Provided direct staff management functions related to the Containment Evaluation Panel (CEP) and served as alternate DOE/NV Manager's representative to this group comprised of approximately 15 internationally recognized scientific experts charged with evaluating the adequacy of the containment plan for each proposed nuclear test.

- Provided policy interpretations and management philosophy to the Panel as needed
- Served as a primary DOE/NV point of contact with the USAF /DOE Liaison Officer in carrying out the Memorandum of Understanding executed between the Secretary, DOE, and the Secretary, USAF, for technical and administrative coordination of national defense-related programs within the state of Nevada
- Managed the Facility Representative Program for DOE/NV contractor facilities as assigned.
- Managed programs, projects and test-related activities through two functional units with a total of 16 employees. As supervisor, responsible for selecting, hiring training, appraising, disciplining and rewarding employees.
- Advised and participated in the formulation and development of DOE/NV management, operational control and policies relating to the accomplishment of nuclear experiments and tests, recommending operations, suggesting and implementing improvements in methods and procedures
- Developed, coordinated and directed operational programs designed to ensure the successful and safe field execution of all tests and experiments under DOE/NV jurisdiction in an environmentally acceptable manner, including those involving the detonation of nuclear and nonuclear systems, and others as required
- Coordinated and ensured the accomplishment of operational aspects of all DOE/NV special projects including:
  - Activities relating to spill test facility program
  - Nuclear Emergency Search Team programs
  - DOE Pacific activities
  - Tests of nonnuclear military weapon systems
- Directed the formulation, integration, and implementation of programs in support of DOE/NV activities in:
  - The physical sciences including geology, seismology, geophysics, and meteorology
  - Engineering applications and analysis of dynamic motion to man-made structures such as high-rise buildings, water impoundment's, and natural landmarks
- Provided overall direction of DOE/NV test-related aircraft support program establishing priorities for completion of same. Served as primary interface with the USAF and Federal Aviation Agency (FAA) related to use of restricted airspace
- Provided for the proper functioning of the Operations Coordination Center at Control Point 1 and at other DOE/NV sites
- Provided overall guidance for contractors engaged to carry out approved programs in the meteorological, geological, seismological, and structural engineering sciences. Periodically reviewed and evaluated through reports and site visits to contractor organizations, the conduct and progress of studies and made recommendations to correct deficiencies or inconsistencies
- Participated in contractor selections and contract negotiations for activities relating to field and laboratory investigations related to the physical sciences.

Examined and evaluated research proposals and requested reviews by other authorities

- Served as the DOE/NV Technical Program Manager and Contracting Officer's Representative for designated contracts assigned to AMO, performed administrative duties pertaining to meteorology, seismology, geology, and environmental protection contractors and agencies
- Served as a Responsible Operating Official (ROO) for the Work Authorization Directives (WADs) under the Work Authorization and Control systems. As a ROO, evaluated contractor performance related to designated WADs, and summarizes results of such activities in reports
- Provided scientific, technical and other support to the CEP and the Threshold Treaty Review Panel, preparing detonation authority requests, master test schedules and maintaining official DOE/NV test-related files and records
- Served in special study and task force assignments as well as representing the AMO and Manager, DOE/NV, in key delegated positions
- Provided for the review of correspondence procedures, regulations, and other management directives to determine their applicability to DOE/NV and TOD, and ensured proper implementation thereof
- Served as primary POC in providing liaison with the USAF to ensure the technical and administrative coordination of assigned national defense missions. Negotiated operational schedule modifications and approved restricted air space usage to maximize benefits to both agencies
- Provided overall management and direction of the DOE/NV Duty Officer Program ensuring appropriate coverage 24 hours a day, 7 days a week

**1988/90- Director, Verification Management Division, Assistant Manager for Operations, DOE/NV**

- Led the DOE's efforts to prepare for and conduct onsite treaty verifications that were negotiated as a part of nuclear testing treaties. Involved with the Threshold Test Ban Treaty and Peaceful Nuclear Explosions Treaty that were bilateral negotiations between the United States and the former Soviet Union (FSU).
- Served as the initial U.S. team leader for the Joint Verification Experiment at the FSU's test site in Kazakhstan and also as the U.S. team leader during the actual Soviet Shagan nuclear test
- Served as a technical expert to the U.S. delegation in Geneva, Switzerland, during negotiations of the Threshold Test Ban Treaty (TTBT) with the FSU in 1989 and 1990. The treaty was signed by the U.S. and FSU in June, 1990
- Served as a member of the first Joint Coordinating Group between the U.S. and the FSU in preparation for the Soviets to conduct onsite verification of the U.S. Junction nuclear test as part of the TTBT

- **1985-88 -Director, Nuclear Systems Division, Assistant Manager for Operations, DOE/NV**
- Managed the Nuclear Emergency Search Team, Aerial Measurements Systems and other DOE/NV emergency response programs
- Managed the DOE/NV Nuclear Explosive Safety Program
- Served as the field team leader/member for some DOE responses to intelligence activities and radiation accidents
- **1976/85- Nuclear Systems Officer, Assistant Manager for Operations, DOE/NV**
- Chaired nuclear explosive safety surveys and studies
- Provided daily management and oversight of the NEST and AMS programs
- Supported Operation Morning Light, the DOE's effort to recover the remains of a Soviet nuclear powered satellite that crashed in the Northwest Territory of Canada in January, 1978
- Served as DOE/NV representative on and chairman of several NEST working groups and Joint United States/United Kingdom working groups
- Supported numerous NEST field exercises as a team member or in a planning capacity
- **Prior to 1976: EG&G Energy Measurements**
- Designed, developed and fielded radiation detectors used by the national laboratories (Los Alamos, Sandia and Lawrence Livermore), the Defense Nuclear Agency and some of its contractors as part of their diagnostics measurements in the nuclear weapons testing program at the Nevada Test Site and other locations where the U.S. tested nuclear weapons

**Senior Technical Safety Manager  
Qualification Resume**

<b>Name:</b>	<b>Stephen A. Mellington</b>
<b>Organization:</b>	<b>DOE Nevada Operations Office</b>
<b>Position Title:</b>	<b>Deputy Assistant Manager for Environmental Management</b>
<b>Education Summary:</b>	<b>B.S. Soil Science, University of Maryland</b>

**Relevant Background/Experience Summary:**

**2/98 – Present - Deputy Assistant Manager for Environmental Management (AMEM)**

- Principle functions of the AMEM office are:
- Preparation, annual revision, and implementation of the environmental restoration and waste management Project Baseline Summaries and Risk Data Sheets
  - Control and validation of cost, schedule, and priority of EM activities
  - Operational responsibility for designated EM Program facilities both on and off the Nevada Test Site (NTS)
  - Manage low-level radioactive and mixed waste disposal programs and facilities
  - Plan and implement environmental assessment and remediation technology development and demonstration programs
  - Serve as focal point for administering hazardous material transportation safety program
  - Plan coordinate and direct the integrated program to assess the effects, monitor the conditions, and minimize potential adverse impacts to groundwater systems from past and ongoing NTS activities; ensuring that all applicable environmental, safety, and health regulations, policies, and standards are applied to assigned activities; maintain the programmatic interface with federal and state regulatory agencies for all agreements relating to environmental restoration and waste treatment, storage, and disposal operations, and coordinate and facilitate the new business activities for the complex.

**6/9 - 2/98 Director, Environmental Restoration Division, DOE/NV**

- Manage the Nevada Environmental Restoration Project (NV ERP)
  - Evaluation of Nevada Test Site (NTS) and other off-site locations where contamination may exist and remediate them as necessary to comply with environmental laws
  - Implementation of this program is scheduled over a 20 year period at a cost of over \$800M
- Serve as the NV expert for implementation of the requirements for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and corrective actions under the Resource Conservation and Recover Act (RCRA)
  - National Environmental Policy Act documents required for CERCLA and RCRA are prepared under my guidance
  - Interpret environmental regulations and DOE policies pertaining to the environmental laws and then develop management plans that form the framework for their implementation

**Major Duties**

- Human Resources Management/Supervision:
  - Supervise an interdisciplinary staff of 20 federal employees
  - Select candidates using fair and unprejudiced employment practices and ensure that equal opportunities are extended to all persons
  - Use the performance improvement system to improve employee effectiveness and provide career counseling
  - Assign activities to division staff responsible for managing multiple contractors conducting remedial action work
- **Project Control:**
  - Ensure all requirements of DOE's 4700 series orders are implemented
  - Develop and validate cost, schedule, and technical baselines and subsequent evaluation of this baseline utilizing a performance measurement system
  - Formulate and justify annual budget requests to ensure that all requirements identified in the NV ERP baseline and other planning documents are consistent with HQ guidance
  - Develop environmental restoration project baseline summaries, provide input to the DOE Ten-Year Plan, prepare the NV ERD Management Plan, and provide monthly and quarterly reports to EM/HQ utilizing the EM Progress Tracking System
  - Serve as the performance monitor for cost plus award fee management and operating contractors in the operation area of environmental assessment and remediation activities.



- Serve as the contracting officer representative for an environmental services contractor
- **Regulatory Compliance Management:**
  - Serve as the DOE/NV expert for environmental investigation and remedial activities in response to CERCLA and RCRA
  - Determine, through consultation with management and on-site contractors and by review of facts provided by guidance documents and studies, the best scope and time frame for the accomplishments of environmental restoration objectives
  - Ensure all CERCLA and environmental restoration activities are properly integrated with the requirements of:
    - National Environmental Protection Act (NEPA)
    - Safe Drinking Water Act (SDWA)
    - Clean Air Act (CAA)
    - Clean Water Act (CWA)
    - National Historic Preservation Act
    - Endangered Species Act
  - Serve as the lead negotiator for the development of Federal Facility Agreements between DOE and the State of Nevada pertaining to environmental restoration activities and corrective measures at the NTS and other off-site locations within Nevada

**4/92 - 5/93 - Acting Director, Environmental Restoration Division, DOE/NV**

- Manage the Nevada Environmental Restoration Project (NV ERP)
  - Evaluation of Nevada Test Site (NTS) and other off-site locations where contamination may exist and remediate them as necessary to comply with environmental laws
  - Implementation of this program is scheduled over a 20 year period at a cost of over \$800M
- Serve as the NV expert for implementation of the requirements for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and corrective actions under the Resource Conservation and Recover Act (RCRA)
  - National Environmental Policy Act documents required for CERCLA and RCRA are prepared under my guidance
  - Interpret environmental regulations and DOE policies pertaining to the environmental laws and then develop management plans that form the framework for their implementation

**Major Duties**

- **Human Resources Management/Supervision:**
  - Supervise an interdisciplinary staff of 20 federal employees
  - Select candidates using fair and unprejudiced employment practices and ensure that equal opportunities are extended to all persons
  - Use the performance improvement system to improve employee effectiveness and provide career counseling
  - Assign activities to division staff responsible for managing multiple contractors conducting remedial action work
- **Project Control:**
  - Ensure all requirements of DOE's 4700 series orders are implemented
  - Develop and validate cost, schedule, and technical baselines and subsequent evaluation of this baseline utilizing a performance measurement system
  - Formulate and justify annual budget requests to ensure that all requirements identified in the NV ERP baseline and other planning documents are consistent with HQ guidance
  - Develop environmental restoration project baseline summaries, provide input to the DOE Ten-Year Plan, prepare the NV ERD Management Plan, and provide monthly and quarterly reports to EM/HQ utilizing the Em Progress Tracking System

- Serve as the performance monitor for cost plus award fee management and operating contractors in the operation area of environmental assessment and remediation activities.
- Serve as the contracting officer representative for an environmental support services contractor
- **Regulatory Compliance Management:**
  - Serve as the DOE/NV expert for environmental investigation and remedial activities in response to CERCLA and RCRA
  - Determine, through consultation with management and on-site contractors and by review of facts provided by guidance documents and studies, the best scope and time frame for the accomplishments of environmental restoration objectives
  - Ensure all CERCLA and environmental restoration activities are properly integrated with the requirements of:
    - National Environmental Protection Act (NEPA)
    - Safe Drinking Water Act (SDWA)
    - Clean Air Act (CAA)
    - Clean Water Act (CWA)
    - National Historic Preservation Act
    - Endangered Species Act
  - Serve as the lead negotiator for the development of Federal Facility Agreements between DOE and the State of Nevada pertaining to environmental restoration activities and corrective measures at the NTS and other off-site locations within Nevada

**7/90 - 3/92 - Chief, Environmental Restoration Branch, DOE/NV**

- Manage the Nevada Environmental Restoration Project (NV ERP)
  - Evaluation of Nevada Test Site (NTS) and other off-site locations where contamination may exist and remediate them as necessary to comply with environmental laws
  - Implementation of this program is scheduled over a 20 year period at a cost of over \$800M

- Serve as the NV expert for implementation of the requirements for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and corrective actions under the Resource Conservation and Recover Act (RCRA)
  - National Environmental Policy Act documents required for CERCLA and RCRA are prepared under my guidance
  - Interpret environmental regulations and DOE policies pertaining to the environmental laws and then develop management plans that form the framework for their implementation

### **Major Duties**

- **Human Resources Management/Supervision:**
  - Supervise an interdisciplinary staff of 12 federal employees
  - Select candidates using fair and unprejudiced employment practices and ensure that equal opportunities are extended to all persons
  - Use the performance improvement system to improve employee effectiveness and provide career counseling
  - Assign activities to division staff responsible for managing multiple contractors conducting remedial action work
- **Project Control:**
  - Ensure all requirements of DOE's 4700 series orders are implemented
  - Develop and validate cost, schedule, and technical baselines and subsequent evaluation of this baseline utilizing a performance measurement system
  - Formulate and justify annual budget requests to ensure that all requirements identified in the NV ERP baseline and other planning documents are consistent with HQ guidance
  - Develop environmental restoration activities data sheets, provide input to the DOE Five-Year Plan, prepare the NV Site Specific Plan, and provide monthly and quarterly reports to EM/HQ utilizing the Em Progress Tracking System
  - Serve as the performance monitor for cost plus award fee management and operating contractors in the operation area of environmental assessment and remediation activities.
  - Serve as the contracting officer representative for an environmental support services contractor

- **Regulatory Compliance Management:**
  - Serve as the DOE/NV expert for environmental investigation and remedial activities in response to CERCLA and RCRA
  - Determine, through consultation with management and on-site contractors and by review of facts provided by guidance documents and studies, the best scope and time frame for the accomplishments of environmental restoration objectives
  - Ensure all CERCLA and environmental restoration activities are properly integrated with the requirements of:
    - National Environmental Protection Act (NEPA)
    - Safe Drinking Water Act (SDWA)
    - Clean Air Act (CAA)
    - Clean Water Act (CWA)
    - National Historic Preservation Act
    - Endangered Species Act
  - Serve as the lead negotiator for the development of Federal Facility Agreements between DOE and the State of Nevada pertaining to environmental restoration activities and corrective measures at the NTS and other off-site locations within Nevada

**9/87 - 6/90 - Environmental Compliance Specialist, DOE/NV**

- Support the Nevada Environmental Restoration Project (NV ERP)
  - Evaluation of Nevada Test Site (NTS) and other off-site locations where contamination may exist and remediate them as necessary to comply with environmental laws
  - Implementation of this program is scheduled over a 20 year period at a cost of over \$800M

- Serve as the NV expert for implementation of the requirements for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and corrective actions under the Resource Conservation and Recovery Act (RCRA)
  - Served as the NVO National Environmental Policy Act Compliance Officer
  - Interpret environmental regulations and DOE policies pertaining to the environmental laws and then develop management plans that form the framework for their implementation

### **Major Duties**

- **Environmental Restoration Program:**
  - Prepare the DOE/NV environmental planning documents
  - Ensure all environmental restoration funded activities are carried out in a manner which fulfills regulatory requirements and meets program objectives
  - Serve as the DOE/NV expert for environmental investigation and remedial activities in response to CERCLA and RCRA
  - Ensure all CERCLA and environmental restoration activities are properly integrated with the requirements of:
    - National Environmental Protection Act (NEPA)
    - Safe Drinking Water Act (SDWA)
    - Clean Air Act (CAA)
    - Clean Water Act (CWA)
    - National Historic Preservation Act
    - Endangered Species Act
  - Provide briefings and presentations pertaining to the environmental restoration program with audiences that include upper DOE management, federal and state regulatory agencies, state and local government representatives, affected Indian Nations and environmental interest groups
- **Program Planning and Budgeting:**
  - Serve as a primary DOE/NV coordinator for the development of the DOE/NV environmental strategic planning documents
  - Ensure DOE/NV planning is in accordance with DOE/HQ guidance and that milestones and related costs are adequate to meet regulatory requirements
  - Develop budgets for the environmental restoration program
  - Track expenditures and progress toward meeting established milestones

- **Regulatory Implementation:**

- Serve as the DOE/NV expert for implementing CERCLA as amended by the Superfund Amendments and Reauthorization Act (SARA), NEPA, TSCA, CAA, CWA, ESA, NHPA
- Interpreted regulations and DOE/HQ guidance pertaining to those laws and then provided guidance to DOE management, staff, and contractors in the form of DOE/NV orders, memorandum, and briefings
- Served as the DOE/NV emergency coordinator for CERCLA/SARA and reported all releases regulated by these implementing regulations to the National Response Center and the State Emergency Response Commission
- Ensured all reporting requirements of SARA Title III (Community Right-to-Know Act) were met

**10/84 - 9/87 - Natural Resource Specialist, Bureau of Land Management**

- Served as District Planning Coordinator and Special Projects Team Leader (Wilderness Environmental Impact Statements (EIS), Resource Management Plans, and Third Part Contracts) which included complex and diverse environmental issues including:
  - wilderness
  - land disposal and withdrawal (military)
  - hazardous material
  - utility corridors
  - water and air resources
  - rangeland management
  - recreation
  - cultural resources
  - wildlife and mineral development
- Principle planning and environmental planning specialist for the Las Vegas District Office for the Bureau of Land Management
- Project Manager for the Esmeralda - Southern Nye Resource Management Plan/EIS
- Project Manager for the Sierra Club vs Watt Wilderness EIS
- Project Manager for the Nellis Range RMP/EIS
- Project Manager for the Clark County Wilderness EIS

## **Major Duties**

- **EIS Preparation and Review:**
  - Ensured all documents were in compliance with all applicable laws, regulations, and policies:
    - National Environmental Protection Act (NEPA)
    - CEQ Regulations
    - American Antiquities Act
    - Resource Conservation and Recovery Act (RCRA)
    - Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
    - Wilderness Act
    - Federal Land Policy and Management Act
    - Safe Drinking Water Act (SDWA)
    - Clean Air Act (CAA)
    - Clean Water Act (CWA)
    - National Historic Preservation Act
    - Endangered Species Act
  - Prepared schedules and identified manpower requirements and development strategies to effect the timely completion of complex documents in limited time frames
  - Conducted briefings, workshops, and formal public hearings associated with resources management planning in the District
- **Planning Program Coordination:**
  - Coordinated the review of internal, third party, or other agency planning and environmental documents
    - Forest Service Management Plan EIS
    - Yucca Mountain Repository EA
    - Various right-of-way EISs
  - Provided necessary guidance to District staff in the development and review of land use plan amendments and environmental assessments
- **Programming/Budgeting:**
  - Developed the annual work plan submissions for the District's planning program and the portion of the Wilderness program pertaining to EIS preparation



- **Human Resource Management/Supervision:**

- Select candidates using fair and unprejudiced employment practices and ensure that equal opportunities are extended to all persons
- Use the performance improvement system to improve employee effectiveness and provide career counseling
- Assign activities to division staff responsible for managing multiple contractors conducting remedial action work

- **Training Coordination:**

- Provide training and guidance to all employees involved in the planning process by holding formal training session and informal workshops

**5/83 - 10/84 - Technical Publications Editor, Bureau of Land Management**

- Served as Project Manager of the Clark County Wilderness EIS and then District Planning Coordinator and Resource Management Plan/EIS Project Manager

**Major Duties**

**EIS Preparation and Review:**

- Ensured all documents produced were in compliance with all appropriate laws, regulations, and policies:
  - National Environmental Protection Act (NEPA)
  - CEQ Regulations
  - American Antiquities Act
  - Resource Conservation and Recovery Act (RCRA)
  - Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
  - Wilderness Act
  - Federal Land Policy and Management Act
  - Safe Drinking Water Act (SDWA)
  - Clean Air Act (CAA)
  - Clean Water Act (CWA)
  - National Historic Preservation Act
  - Endangered Species Act
- Prepared schedules and identified manpower requirements and development strategies to effect the timely completion of complex documents in limited time frames
- Conducted briefings, workshops, and formal public hearings associated with resources management planning in the District

- **Planning Program Coordination:**
  - Coordinated the review of internal, third party, or other agency planning and environmental documents
  - Provided necessary guidance to District staff in the development and review of land use plan amendments and environmental assessments
- **Programming/Budgeting:**
  - Developed the annual work plan submissions for the District's planning program and the portion of the Wilderness program pertaining to EIS preparation
- **Human Resource Management/Supervision:**
  - Select candidates using fair and unprejudiced employment practices and ensure that equal opportunities are extended to all persons
  - Use the performance improvement system to improve employee effectiveness and provide career counseling
  - Assign activities to division staff responsible for managing multiple contractors conducting remedial action work
- **Training Coordination:**
  - Provide training and guidance to all employees involved in the planning process by holding formal training session and informal workshops

**Prior to 5/83 - Held Positions as Environmental Specialist, Natural Resources Specialist, Soil Scientist, Rail Engineer, and Professor of Agriculture for the Bureau of Land Management, Washington Metropolitan Area Transit, and the Garrett County Community College of Maryland**

### **Major Duties**

- EIS Preparation and Review
- Budgeting
- Program Management
- Environmental Law Interpretation and Analysis
- Surveyed 250,000 Acres of Soil in Accordance with the National Cooperative Soil Survey Standards
- Soil Analysis
- Performed skilled electrical/electro-mechanical work on electrical distribution systems, plant lighting, and electro-mechanical equipment
- Taught soils courses

<b>Name:</b>	<b>Audrey A. Clark</b>
<b>Organization:</b>	<b>DOE Nevada Operations Office</b>
<b>Position Title:</b>	<b>Training and Development Program Manager</b>
<b>Education Summary:</b>	<b>B.A. Education, Boise State University M.A. Psychology, Counseling &amp; Guidance, University of Northern Colorado Qualified in the Technical Trainer Functional Area</b>

### **Relevant Background/Experience Summary:**

#### **6/91 - Present – Training and Development Program Manager, Department of Energy, Nevada Operations Office (DOE/NV)**

- Administer the DOE/NV Technical Qualification Program, Senior Technical Safety Manager Program, and other technical and professional qualification programs for DOE/NV.
- Provide direction and guidance to Department of Energy/ Nevada (DOE/NV) and contractor personnel regarding all aspects of training and development programs.
- Coordinate/direct the development, review, evaluation, and/or concurrence of administrative procedures, training program standards, certification/qualification program requirements, and budget submission
- Responsible for the preparation of written reports and special studies regarding the technical and administrative aspects of training programs and for the formal and informal presentation of those reports and studies to management
- Oversee, guide, direct, and monitor DOE/NV contractors to assure compliance with DOE and DOE/NV training standards and policies
- Coordinate the review, monitoring, and evaluation of approved training programs and materials and coordinate the surveillance of training program implementation
- Direct staff review and evaluations of contractor proposed qualification standards and certification programs.
- Responsible for providing technical direction, advice and guidance to team members
- Assign coordinate and review work assignment; balance workload among the team; instruct employees on job processes and techniques; provide technical direction and guidance; interpret and implement organizational policies and procedures

**1/86 - 6/91 – Director, Evaluation and Standardization Division, U.S Army Intelligence Center and School, Ft. Huachuca AZ**

- Developed and implemented a training evaluation and standardization program to determine the validity of active duty military intelligence courses and reserve component courses in multiple military occupations specialties (MOS) and officer tracks. The courses evaluated were both technical in nature (signal intelligence, electronic warfare, radar operations, imagery interpretation, and fixed wing aerial imagery) to human intelligence oriented (counter intelligence, interrogation, and counter terrorism).
- Provided feedback to course analysts and developers enabling them to more finitely provide training in the right amount and at the right time in a soldier's career.
- Developed an assessment process that entailed surveys, observations, and reviewed, wherever possible, return on investments
- Conducted external evaluations to active and reserve units in the field to ascertain if the training provided at the service school was producing a soldiers capable of performing their job to prescribed standards.
- Supervised the work of 12 – 14 employees to include civilians, officers, warrant officers, and enlisted men
- Provided briefings to all echelons within the Center and School through that of the Commanding General

3/83 – 1/86 -- Education Specialist, Staff and Faculty Development Division, US Army Intelligence Center and School, Fort Huachuca, AZ

- Served as the primary division subject matter expert on training and Systems Approach to Training methodology.
- Served as consultant within USAICS on a broad range of training-related topics to include:
  - Job and Task Analysis
  - Criteria Referenced Testing
  - Lesson Plan Development
  - Programs of Instruction
  - Individual Training Plans
  - Graduation Criteria
  - Evaluations
  - Training Validations
  - Target Population Descriptions
  - Data Collection Methodologies
  - Method and Media Selection
  - Job Aids
  - Course Sequencing

- Critical Task Selection Models
- Skill and knowledge Hierarchies
- Programmed Instruction
- Served as an instructor for the staff and faculty of USAICS teaching Systems Approach to Training, Training Management Counseling (both of these courses were accredited at the graduate level), Basic Instructor Training, Test Writing Workshops, and portions of an Advanced Instructional Methodology course.
- Developed courses for the staff and faculty of USAICS to include the Training Management Counseling Course and the Test Writer's Development Course. Redeveloped portions of the Basic Instructor Training Course and the Systems Approach to Training Course.

7/77 – 3/83 – Education Specialist, Officer Training Division, US Army Intelligence Center and School, Fort Huachuca, AZ

- Managed officer programs of instruction.
- Compiled and published the Military Intelligence Officer Basic Course program of instruction.
- Served as the division's training consultant and educational advisor for analysis, design, and development of Military Intelligence officer and warrant officer courses.

## **APPENDIX D**

### **DOE/NV EMPLOYEES CONTACTED**

#### **Technical Qualification Program Participants:**

Dennis Armstrong  
Audrey Clark  
Stephen Curtis  
Ruston Eleogram  
Travis Hunsaker  
Dario Luna  
Deborah Manning  
John McClure  
Leslie Monroe  
Joseph Murphy  
Victoria Niemann  
James Owens  
Fred Penrod  
Lisa Seppala  
Gary Snodgrass  
Kevin Thorton  
Laura Tomlinson  
Scott Traeger  
Stewart Thomas  
Peter Munding  
Barry Langendorf  
Robert Friedrichs

#### **Senior Technical Safety Managers:**

G.W. Johnson, Manager, DOE/NV  
Joseph Fiore, Assistant Manager for National Security  
Gylan Allen, Deputy Assistant Manager for National Security  
Kathy Izell, Assistant Manager for Technical Services  
Michael Marelli, Deputy Assistant Manager for Technical Services  
Stephen Mellington, Deputy Assistant Manager for Environmental Management  
Stephen Ronshaugen, Director, Site Operations Division  
John McGrail, Director, Stockpile Stewardship Division  
Kenneth Hoar, Director, Environment, Safety, and Health Division  
Steven Lawrence, Director, Engineering and Asset Management Division  
Runore Wycoff, Director, Environmental Restoration Division  
Frank DiSanza, Director, Waste Management Division

#### **Other Program Managers:**

Wayne Adams, Director, Safeguards and Security Division  
Jerry Truax, Director, Human Resources Division

Others:

Donna Schramm, Team Leader, Federal Human Resources Program



## **APPENDIX E DOCUMENTS REVIEWED**

### **Qualifications Records for:**

Scott Traeger  
Leslie Monroe  
Lori Arent  
David Hall  
Dario Luna  
Travis Hunsaker  
Carl Gertz  
Joseph Fiore  
Stephen Ronshaugen  
Steven Lawrence

### **Procedures:**

HRD.TDP.TQP.01, Identification of Technical Qualification Program Participants  
HRD.TDP.TQP.02, Employee Evaluation and Exemptions/Equivalencies  
HRD.TDP.TQP.03, Completion of Learning Activities  
HRD.TDP.TQP.04, Documentation of Learning Activities  
HRD.TDP.TQP.05, Office/Facility-Specific Qualification Standards  
HRD.TDP.TQP.06, Qualification and Completion of Program  
HRD.TDP.TQP.07, Control and Administration of Tests  
HRD.TDP.TQP.08, Development of Tests  
HRD.TDP.TQP.09, Qualifying Facility Representatives  
HRD.TDP.TQP.10, Conduct of Oral Boards  
HRD.TDP.TQP.11, Final Evaluated Walk-Through – Facility Representative  
HRD.FHP.XX, Staffing

### **Computer Training Programs:**

Qualifying Officials Training

### **Self-Assessments:**

Training and Development TQP Administrative Self-Inspection, July 15, 1998

### **TQP Tracker Data Base**

Status of Participants as of June 30, 1998

### **Other:**

Amendment to Michael Marelli's position description, May 13, 1998  
Technical Crediting Plan Form